

# Notice of Allowability

Application No.

09/997,669

Examiner

LeChi Truong

Applicant(s)

LUI F STEVENS

Art Unit

2194

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/17/2005.
2. ☒ The allowed claim(s) is/are 1-5, 7, 8, 9-14, 16, 17, 18-21, 22-27 now renumbered as claims 1-25.
3. ☒ The drawings filed on 28 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**


7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |                                                                                                        |                                                                                    |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)                                        | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)         |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____  | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                 |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance           |
|                                                                                                        | 9 <input type="checkbox"/> Other                                                   |

  
**MENG-TAI AN**  
SUPERVISORY PATENT EXAMINER  
COPY CENTER 2100

### **Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Robert A. Greenberg (Registration: 44,133) on 04/05/2005.

3. Amend the following claim:

I. Claim 1:

A distributed processing system comprising:

a plurality of processing objects; and

an object management system,

wherein at least two of the processing objects comprise an interface in the object management system defining a deferred procedure call from first processing object to a second processing object according to an interface definition language, the interface definition language including a source code instruction having a syntax including an "interface" keyword, an interface name, a return value type, a function name, at least one function argument, and an identifier from a set of values that includes an identifier of a one-way procedure call, an identifier of a two-way blocking procedure call, and an identifier of a deferred procedure call;

wherein the first processing object comprises:

logic to execute a crosscall stub to initiate the procedure call to the second processing object; and

logic to execute a callback skeleton in response to receipt of a return value from the second processing object,

wherein the crosscall stub and callback skeleton are derived from a compilation of the deferred procedure call instruction formatted according to the interface description language.

II. Cancel claim 6

III. Claim 7:

The distributed processing system of claim 1, wherein the second processing object comprises logic to execute a crosscall skeleton in response to a procedure call from the crosscall stub.

IV. Claim 9:

A processing system comprising:

a first processing core adapted to process information in data packets received from a transmission medium; and

a second processing core comprising:

a plurality of processing objects, at least one processing object having an interface with one or more processes hosted on the first processing core; and

an object management system, wherein at least two of the processing objects comprise an interface in the object management system defining a deferred procedure call from first processing object to a second processing object according to an interface definition language, the interface definition language including a source code instruction having a syntax including an “interface” keyword, an interface name, a return value type, a function name, at least one function argument, and an identifier from a set of values that includes an identifier of a one-way procedure call, an identifier of a two-way blocking procedure call, and an identifier of a deferred procedure call;

wherein the first processing object comprises:

logic to execute a crosscall stub to initiate the procedure call to the second processing object; and

logic to execute a callback skeleton in response to receipt of a return value from the second processing object,

wherein the crosscall stub and callback skeleton are derived from a compilation of the deferred procedure call instruction formatted according to the interface description language.

V. Cancel claim 15

VI. Claim 16:

The processing system of claim 9, wherein the second processing object comprises logic to execute a crosscall skeleton in response to a procedure call from the crosscall stub.

VII. Claim 17:

The processing system of claim 9, wherein the crosscall stub and callback skeleton comprise image generated from a compilation of a single procedure call interface definition formatted according to the interface description language, and wherein the second processing object comprises logic to asynchronously call back the first processing object in response to the procedure call.

VIII. Claim 18:

A computerized method for distributed processing system comprising:

accessing a deferred procedure call instruction in a source code module corresponding with a first processing object, the deferred procedure call instruction being formatted according to an interface description language, the interface instruction having a syntax including an “interface” keyword, an interface name, a return value type, a function name, at least one function argument, and an identifier from a set of values that includes an identifier of a one-way procedure call, an identifier of a two-way blocking procedure call, and an identifier of a deferred procedure call;

compiling the source code module to provide a crosscall stub image and a callback skeleton image based upon the deferred procedure call instruction, wherein the callback skeleton image comprises instructions enabling execution of the first processing object following a procedure call to a second processing object and prior to receipt of a return value at the callback skeleton.

IX Claim 22:

An computer executable program product on a storage medium comprising machine-readable instructions for:

accessing formatting a deferred procedure call instruction in a source code module corresponding with a first processing object, the deferred procedure call instruction being formatted according to an interface description language, the interface instruction having a syntax including an “ interface” keyword, an interface name, a return value type, a function name, at least one function argument, and an identifier from a set of values that includes an identifier of a one-way procedure call, an identifier of a two-way blocking procedure call, and an identifier of a deferred procedure call; and

compiling the source code module to provide a crosscall stub image and a callback skeleton image based upon the deferred procedure call instruction, wherein the callback skeleton image comprises instructions enabling execution of the first processing object following a procedure call to a second processing object and prior to receipt of a return value at the callback skeleton.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is ( 571) 272 3767. The examiner can normally be reached on 8 - 5.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

April 11, 2005

  
**MENG-AL T. AN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER**